REMARKS

The claims were objected to. Claims 12 to 25 were rejected under 35 U.S.C. 112, first and second paragraphs. Claims 12, 13, 16 and 17 were rejected under 35 U.S.C. 102 (b) as anticipated by Massie.

Claims 1 to 27 have now been canceled without prejudice.

New claims 28 to 40 are presented to better clarify the present invention. Claim 28 is independent and claims 29 to 40 depend from claim 29, so that withdrawal of the objection to the claim numbering is respectfully requested. No new matter has been added.

It is respectfully submitted that claim 28 and the specification now provide a clear written description of the wave field microscope of the present invention, and that claim 28 is definite.

Claim 28 recites a wave field microscope in which on object is movable through a point pattern generated by two or three standing wave fields. Each object structure of the object causes a modulation of the light so that a point spread function of the wave field microscope is provided. The modulation is a function of the point spread function of the wave field microscope through convolution of the point pattern and the detection point spread function. (See specification at page 9, line 26 to page 10, line 21 for example). A space between two object structures thus is detectable as a function of values of the maximums, i.e. peaks, of the point spread function of the wave field microscope for the two object structures so as to permit the wave field microscope to measure geometric distances between the object structures.

Withdrawal of the rejections under 35 U.S.C. 112 first and second paragraphs is respectfully requested.

With respect the 35 U.S.C. 102 rejection under Massie et al., Massie et al. does not disclose "the interference pattern being a two- or three dimensional point pattern generated by two or three standing wave fields" or "the object being shiftable relative to the point pattern, each object structure causing a modulation of the light detected by the optical detection system within a detection point spread function, the modulation being given by the point spread function of the wave field microscope through convolution of the point pattern and the detection point spread function" as now recited in claim 28. Nor would it have been obvious to have so modified Massie, as Massie first creates an interference pattern after the light hits an object to be measured, and the object is not shiftable.

Withdrawal of the rejection with respect to 35 U.S.C. 102(b) is respectfully requested.

CONCLUSION

It is respectfully submitted that the application is now in condition for allowance and applicants respectfully request such action.

Respectfully Submitted,

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